

ABSTRACT

5 The present invention defines a DNA: protein-binding assay useful for
screening libraries of synthetic or biological compounds for their ability to
bind DNA test sequences. The assay is versatile in that any number of test
sequences can be tested by placing the test sequence adjacent to a defined
protein binding screening sequence. Binding of molecules to these test
sequence changes the binding characteristics of the protein molecule to its
cognate binding sequence. When such a molecule binds the test sequence the
10 equilibrium of the DNA:protein complexes is disturbed, generating changes in
the concentration of free DNA probe. Numerous exemplary target test sequences
(SEQ ID NO:1 to SEQ ID NO:600) are set forth. The assay of the present
invention is also useful to characterize the preferred binding sequences of any
selected DNA-binding molecule.

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